The claims d fining the invention are as follows:

1. A method of assessing tissue oedema comprising the steps of:

performing a first measurement of bioelectrical impedance of a first anatomical region in a subject at a single low frequency alternating current

performing a second measurement of bioelectrical impedance of a second anatomical region in the same subject at the same low frequency alternating current; and

analysing the two measurements to obtain an indication of the presence of tissue oedema.

2. The method of claim 1, wherein the first anatomical region and the second anatomical region are paired and wherein one of the anatomical regions is unaffected by tissue oedema.

3. The method of claim 1, wherein the first anatomical region and the second anatomical region are dissimilar and wherein one of the anatomical regions is unaffected by tissue oedema.

4. The method of claim 1, wherein the first anatomical region and the second anatomical region are the same and wherein the first measurement and the second measurement are separated in time.

5. The method of claim 1, wherein the anatomical regions are limbs or parts of limbs.

6. The method of claim 1, wherein the single low frequency alternating current is in the range of 5 to 20kHz.

7. The method of claim 6, wherein the single low frequency alternating current is in the range of 10 to 15kHz.

8. The method of claim 7, wherein the single low frequency alternating current is 10kHz.

9. The method of claim 1, wherein the step of analysing the two measurements to obtain an indication of the presence of tissue oedema includes the step of dividing the lesser result of the two

measurements into the greater result of the two measurements to obtain a product.

10. The method of claim 1, wherein the step of analysing the two measurements to obtain an indication of the presence of tissue oedema includes the step of applying the algorithm

$$F = \frac{Z_h}{Z_\ell} - cf$$

where:

F is an indication of tissue oedema;

Z_h is the greater bioelectrical impedance reading;

Z_ℓ is the lesser bioelectrical impedance reading; and

cf is a correcting factor.

11. The method of claim 10, wherein the correcting factor is 1.066.

12. The method of claim 1, wherein the step of analysing the two measurements to obtain an indication of the presence of tissue oedema includes the step of dividing the greater result of the two measurements into the lesser result to obtain a product.

13. The method of claim 12, including the step of analysing the two measurements according to the algorithm

$$F = cf_1 - \frac{Z_\ell}{Z_h}$$

where:

F is an indication of tissue oedema;

cf_1 is a correcting factor;

Z_ℓ is the lesser impedance reading; and

Z_h is the greater impedance reading.

14. The method of claim 13 when used on paired limbs and $cf_1 = 0.862$.

15. The method of claim 1, further including the step of

establishing a correcting factor for analysing the two measurements.

16. The method of claim 15, wherein the step of establishing a correcting factor includes the step of obtaining bioelectrical impedance measurements from a plurality of subjects unaffected by tissue oedema.

17. An apparatus for determining the presence of tissue oedema, including:

current means for applying an alternating current to an anatomical region at a single frequency;

monitoring means to monitor the bioelectrical impedance of said region and produce signals characteristic of bioimpedance; and

analysis means to analyse the signals indicative of bioimpedance to provide an indication of tissue oedema.

18. The apparatus of claim 17, wherein the current means is a proximal electrode and a distal electrode in electrical connection with a power source.

19. The apparatus of claim 17, wherein the monitoring means is a first connection and a second connection for location on or near the anatomical region.

20. The apparatus of claim 17, wherein the analysis means is at least one processing means programmed to perform analysis of data to provide an indication of the presence of tissue oedema.

21. The apparatus of claim 20, wherein the analysis means is programmed to analyse data according to the algorithm

$$F = \frac{Z_h}{Z_\ell} - cf$$

where:

F is the indication of the presence of tissue oedema;

Z_h is a greater bioelectrical impedance measurement;

Z_ℓ is a lesser bioelectrical impedance measurement; and

cf is a correcting factor.

22. The apparatus of claim 20, wherein the analysis means is

programmed to analyse data according to the algorithm

$$F = cf_1 - \frac{Z_\ell}{Z_h}$$

where:

F is an indication of tissue oedema;

cf_1 is a correcting factor;

Z_ℓ is a lesser bioelectrical impedance measurement; and

Z_h is a greater bioelectrical impedance measurement.

23. The apparatus of claim 17, further including means for recording bioimpedance in two anatomical regions of the same subject simultaneously.

24. An apparatus for determining the presence of tissue oedema substantially as described with reference to FIGS. 3 and 4.

25. An apparatus for determining the presence of tissue oedema substantially as described with reference to FIG. 5.